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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,619	12/14/2005	Yutaka Ozawa	050573	6834

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EXAMINER	
REDDY, KARUNA P	

ART UNIT	PAPER NUMBER
1713	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/560,619	OZAWA ET AL.	
	Examiner	Art Unit	
	Karuna P. Reddy	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-10 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to arguments/remarks filed on May 23, 2007. Applicants have not amended any claims. Claims 1-10 are currently pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

    1. Determining the scope and contents of the prior art.
    2. Ascertaining the differences between the prior art and the claims at issue.
    3. Resolving the level of ordinary skill in the pertinent art.
    4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-5, 7-8 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Hoff et al (US 6,066,394) in view of Gyobu et al (US 6,242,560 B1) and Matsumoto et al (US 6,174,943 B1).

    The rejection is adequately set forth in paragraph 3 of the previous office action dated Feb 23, 2007 and is incorporated herein by reference.

5. Claims 1-8 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al (JP 10046099 A) in view of Gyobu et al (US 6,242,560 B1) and Matsumoto et al (US 6,174,943 B1).

The rejection is adequately set forth in paragraph 4 of the previous office action dated Feb 23, 2007 and is incorporated herein by reference.

6. Claims 1 and 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komori (JP 2002088343 A) in view of Gyobu et al (US 6,242,560 B1) and Matsumoto et al (US 6,174,943 B1).

The rejection is adequately set forth in paragraph 5 of the previous office action dated Feb 23, 2007 and is incorporated herein by reference.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoff et al (US 6,066,394) or Komori (JP 2002088343 A) or Matsumoto et al (JP 10046099 A) each individually, in view of Gyobu et al (US 6,242,560 B1) and Matsumoto et al (US 6,174,943 B1) as applied to claims mentioned above, and further in view of Masaru et al (JP 06-079737).

The rejection is adequately set forth in paragraph 6 of the previous office action dated Feb 23, 2007 and is incorporated herein by reference.

Response to Arguments

8. In response to obviousness rejection of claims 1-5 and 7-8 over Hoff et al (US 6,066,394) in view of Gyobu et al (US 6,242,560 B1) and Matsumoto et al (US

6,174,943 B1), applicant's argue the reference does not teach a vinyl monomer with a T_g not lower than 80^0C; examples of acrylonitrile, styrene and methylmethacrylate are not given as examples in Hoff et al; epoxy compounds are stated as additives; does not state the purpose of these additives and it is not clear as to how the epoxy compounds impart the property of solvent resistance, heat stability and prevention of discoloration; functional equivalence of polytetramethylene glycol diglycidyl ether and glycidyl methacrylate; no suggestion or motivation to combine and unexpected results seen in table on page 25 of present specification.

Applicant's arguments have been fully considered but they are not persuasive. The T_g of homopolymer of vinyl chloride is greater than 80^0C as evidenced by Brandrup et al[1].

Furthermore, the features upon which applicant relies (i.e., styrene, acrylonitrile and methyl methacrylate) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In addition, Gyobu et al refer to the epoxy additives as **reactive additives** (column 6, lines 42-43). The additives may be added to polymer prior to transesterification to prepare the thermoplastic elastomer (column 9, lines 64-66)

[1] The reference of Brandrup et al (Polymer Handbook, Fourth Edition (1999), page VI/216)

i.e. a thermoplastic polymer that possesses the properties of a thermoset (polymeric material with a **crosslinked network**).

The functional equivalence is in relation to the ability of polytetramethylene glycol diglycidyl ether and glycidyl methacrylate to act as crosslinking agents. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In response to applicant's argument that there is **no motivation or suggestion to combine,** it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, **epoxy compound "F" of Matsumoto et al is used to raise solvent resistance** and is suggested as an unexpected and superior result in table on page 25 of present invention. It is noted that applicant's intended to show unexpected result to overcome the obviousness rejection of claim 1. However, the showing in table on page 25 is not commensurate in scope with claim 1. The properties (detergent resistance, oil resistance and tensile strength) in example 1 and 2 are inferior to the comparative example 3 based on the properties desired by the invention (paragraph 0077).

9. In response to obviousness rejection of claims 1-8 over Matsumoto et al (JP 10046099 A) in view of Gyobu et al (US 6,242,560 B1) and Matsumoto et al (US 6,174,943 B1), applicant's argue that glycidyl methacrylate is simply listed as a monomer copolymerizable with other monomers and there is no suggestion or motivation to combine with Gyobu et al and Matsumoto '943. Applicant's arguments have been fully considered but they are not persuasive. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The motivation or suggestion to combine is provided in paragraph 8 above and is incorporated herein by reference.

10. In response to obviousness rejection of claims 1 and 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komori (JP 2002088343 A) in view of Gyobu et al (US 6,242,560 B1) and Matsumoto et al (US 6,174,943 B1), applicant's argue, there is no motivation or suggestion to substitute polytetramethylene glycol diglycidyl ether for the glycidyl methacrylate and that these are not functionally equivalent; no motivation to combine Komori with Gyobu et al and Matsumoto et al. Applicant's arguments have been fully considered but they are not persuasive. Examiner's reasoning is provided in paragraph 8 above and is incorporated herein by reference.

11. In response to obviousness rejection of claim 10 over Hoff et al (US 6,066,394) or Komori (JP 2002088343 A) or Matsumoto et al (JP 10046099 A) each individually, in view of Gyobu et al (US 6,242,560 B1) and Matsumoto et al (US 6,174,943 B1) as applied to claims mentioned above, and further in view of Masaru et al (JP 06-079737), applicant's argue that Masaru et al is cited only for the disclosure of making a glove by immersing a mold in a resin emulsion. Applicant's arguments have been fully considered but they are not persuasive. As aptly pointed out by the applicant, Masaru et al is cited by Examiner only for the purpose of making a glove by immersing a mold in a resin emulsion of primary reference. As a mater of fact, claim 10 is drawn to a product-by-process claim. The burden is shifted to the applicant to prove that the glove made by prior art reference is necessarily different from the instantly claimed product.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karuna P. Reddy whose telephone number is (571) 272-6566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karuna P Reddy
Examiner
Art Unit 1713

/KR/

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